AMENDMENTS TO THE SPECIFICATION

Please revise paragraph [00042] as follows:

[00042] With respect to the electrode surface area exposed to the flow channel, all three electrode configurations are based on the following critical dimensions that are important for the electrode surface:

Figure 4: The three electrode pairs, also of non-rusting steel, are arranged to project in radial direction. The disk-shaped electrodes have a diameter of 40mm and a curvature radius of 10mm. The spacing between electrodes is 50mm, wherein field intensities of 45 to 80kV/cm will adjust in the pulse amplitude for a pulse of 300kV, depending on the location. The flow channel has an oval cross section to avoid parasitic electrical discharges via the inside wall.

Figure 5: The electrodes are arranged axial symmetrical and consist of non-rusting steel, stainless steel, while the insulating body is made of polyethylene. The diameter of the flow cross section is 50mm while the spacing between the rounded electrodes is approximately 70mm. The curvature radius for the curved surface pointing toward the counter electrode is 20mm. The maximum occurring field intensity for a 300kV pulse does not exceed 50kV/cm.

Figure 6: The flow channel has a diameter of 20mm. The stainless steel electrodes are spaced apart by 60mm for realizing ~~the high-voltage resistance~~ a stability against (electrical) breakdown and form electrical fields in both directions. Exceptions are the marginal electrodes, which are connected to ground and generate only one field in the direction of the adjacent electrode under high voltage. Figure 6 shows field distributions ~~fields generated by 6 electrode pairs,~~ formed with 7 electrodes. The electrodes respectively project semi-spherically into the channel and have a curvature radius of 6mm. The field intensity for a 300kV pulse varies between 40 and 230kV/cm at the apex value. The three above-described

embodiments represent examples for dimensioning.

Please revise paragraph [00044] to read as follows:

[00044] A ~~Marx~~ generator or a Marx generator embodied as LC ladder network offers itself as generator for generating high-voltage pulses in the microsecond to sub-microsecond range, with an amplitude between 300 and 500kV and rise times in the range of 100ns, at current intensities below 10kA and pulse lengths of about 1 microsecond. A Marx generator in this field of application, for example, typically consists of 6 stages. A high-voltage mains is used to charge the individual stages/capacitors with an individual capacity of 140nF to 50kV. The high-voltage pulse with an amplitude of 6 x 50kV = 300kV and an aperiodic pulse length of approx. 1.5µs for an adapted load of approx. 20 Ohm is generated during the process of discharging/conducting through. In the simplest case, for example if only one Marx generator is used, the contactors/spark gaps in the Marx generator are triggered via automatic breakdown. When switching several Marx generators in a system, triggering devices must be used for purposely igniting the spark gaps.